



1731  
CAIN 11-9-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: CAIN MICHAEL B, et al.

Serial No: 09/787,064

Filing Date: 10/18/1999

Title: METHODS OF  
MANUFACTURING SOOT  
FOR OPTICAL FIBER  
PREFORMS AND PREFORMS  
MADE BY THE METHODS

Group Art Unit: 1731

Examiner: Michael Colaianni

REPLY

RECEIVED  
MAY 20 2003  
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Commissioner for Patents  
Alexandria, VA 22313-1450

**RESPONSE TO THE EXAMINER'S OFFICE ACTION**

In reply to the Office Action dated February 26, 2003, designated as Paper No. 4 in the above-captioned application, please enter the following [amendments and] Remarks as follows:

In the Claims

Please cancel claims 3, 12, and 19-22 without prejudice.

Please replace claims 1, 5, and 11 with the following amended claims:

1. (amended) A method of making soot from which an optical fiber preform is made, said method comprising the steps of:
  - a) atomizing a non-aqueous liquid reactant and an aqueous solution to form an aerosol comprising numerous liquid droplets,
  - b) delivering said aerosol into a combustion zone; and
  - c) reacting said aerosol in a flame provided at said combustion zone to form finely divided glass soot particles, wherein said non-aqueous liquid reactant and said aqueous solution to a single burner assembly prior to atomizing said non-aqueous liquid reactant and said aqueous solution.
5. (amended) The method as claimed in claim 4 further comprising the steps of:
  - atomizing said non-aqueous liquid reactant at said first burner assembly to form a first aerosol; and